Marketing AMS Activities

ISSUED MONTHLY BY

AGRICULTURAL MARKETING SERVICE

U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

May 1940 Vol. 2, No. 5

THE FARMER'S SHARE OF THE CONSUMER'S DOLLAR

What part of the consumer's dollar does the farmer get? In a recent Bureau of Agricultural Economics publication--"Price Spreads Between the Farmer and the Consumer"--economists Richard O. Been and Frederick V. Waugh answer this question for 58 foods.

According to Been and Waugh, the farmer in 1939 got about 40 cents of the dollar expended for the 58 foods consumed annually by a typical workingman's family. But a wide variation among foods was noted, the share ranging from 56 cents for eggs to 7 cents for soda crackers. The farmer received large shares for dairy and poultry products and for meat products, but received small shares for canned fruits and vegetables and some highly-processed bakery and cereal products.

The farmer's share has shown a general downward trend since 1913. Before 1920 the farmer's share of the consumer's dollar amounted to more than 50 cents. During the 1920's the share averaged about 47 cents. But since 1930 this share has risen only as high as 45 cents in 1937 after a low of 33 cents in 1932. It has remained unchanged at about 40 cents in 1938 and 1939.

Wage increases have an important effect upon increased demand for farm products, Been and Waugh found. Insofar as higher wage rates are reflected in higher nonagricultural income and are not canceled by reduced employment, consumer expenditures for foods will increase and farm income will rise. Economists generally agree that higher nonfarm incomes benefit farmers, and that favorable effects of wage increases outweigh the unfavorable.

Special Articles in This Issue

1939 NORTHEASTERN VEGETABLE AND POTATO MARKETING PROGRAM OUTLINED

During the past year vegetable growers in the Northeastern States, with the assistance of distributors and various Federal and State agencies, worked to develop an effective program for marketing their crops. A description of the organization and purpose of the Northeastern Vegetable and Potato Council, the development of the marketing program, its objectives, methods of operation, and results obtained during the 1939 season are discussed in Extension Service Circular No. 328, by William C. Ockey.

Summarizing the results of the Council's work in 1939, Ockey finds that improvements were made in the collection and dissemination of crop production information through the expanded and correlated program of the Agricultural Marketing Service. But growers and distributors indicate a need for more emphasis on grading, Ockey finds. To move heavy supplies during the peak production periods, merchandising campaigns in cooperation with distributors have been an effective means of stimulating consumer demand. Opportunity also exists, Ockey says, for developing new markets in the Northeast for certain farm products. Purchases of vegetables by the Federal Surplus Commodities Corporation have helped to eliminate market gluts at various times.

Copies of the circular may be obtained by addressing requests to the Extension Service, Washington, D. C.

---0---

PICKLE PACKERS PLAN PLANTINGS

If pickle packers carry out their early April plans in 1940, an increase of nearly 42 percent in the acreage planted to cucumbers for pickles is in prospect for this season. The acreage planted for 1940 may reach a total of 92,120 acres compared with 64,940 acres planted in 1939.

---0---

LIVESTOCK SLAUGHTER SUPPLIES TO CONTINUE HEAVIER THAN 1939

Slaughter supplies of livestock are expected to continue larger than a year earlier during the summer and fall, the Bureau of Agricultural Economics reports. The effects of the larger supplies upon prices will be partly offset by a stronger domestic consumer demand for meats. Despite German occupation of Denmark, the export outlet for pork and lard during the next several months is not expected to be much larger than it was a year earlier.

---0---

An increase of about 1 percent in the average of farm real estate values during the 12 months ended March 1, 1940, was reported recently by the Bureau of Agricultural Economics.

New York City's fruit and vegetable markets have not kept pace with modern conditions. The cramped quarters and inadequate facilities lead to long hours of costly delays--a matter of vital concern to producers, distributors, and consumers. In the large Washington Street Market most of the streets are only 30 feet wide. Deliveries from stores to trucks are made chiefly by porters using small hand trucks. Tender and highly perishable fruits and vegetables, handled so carefully all the way from farm and orchard, are banged and jiggled along cobblestone streets. A modern market would save millions of dollars in the annual bill for the distribution of fruits and vegetables. --Wendell Calhoun in the January 1940 "Agricultural Situation."

SPECIAL REPORT URGES MODERN PRODUCE MARKET FOR NEW YORK

A comprehensive report on New York's produce market situation recommends the construction of a completely modern wholesale fruit and vegetable market. The report--"The Wholesale Fruit and Vegetable Markets of New York City"--was recently issued as a cooperative project of the Bureau of Agricultural Economics and the Agricultural Marketing Service. William C. Crow, W. T. Calhoun, and J. W. Park are co-authors of the special study.

After analyzing the advantages and disadvantages of various sites, it is recommended that the new market be built at the western end of Long Island on some site between the Williamsburg and the Queensboro Bridge. This general area is near the population center of New York City. Other uses ought to be found for the Washington Street market area, the report indicates, so that dealers can dispose of their property in this location on some equitable basis.

The report urges a completely modern plant. This would mean modern store units with offices and basements, platform space for unloading, display, and sale of goods not handled through stores. Also recommended are auction salesrooms, team-track yards, streets at least 100 feet wide, a parking area for trucks, space for a cold storage plant, and probably a farmers' market, all enclosed with a fence. The initial construction ought to be held to the minimum of actual needs, with provisions for expansion, if necessary.

A market such as recommended would be open to rail and motortruck transportation with facilities for unloading produce directly on the sale floors. Rail operations to and from the market would include provision for diversion of carlot shipments on all connecting lines, both to other terminals or warehouses within the city, and to points beyond.

It is believed that a centralized market, if built and regulated along the lines recommended in the report, would mean annual savings in distribution costs of about $8,500,000, after allowance is made for maintenance of the market and amortization of the investment over a 25-year period.

At the time the survey was made, it was estimated that a satisfactory market could be built at a total cost of about $14,000,000, including the purchase of a suitable site on Long Island.

The market might be constructed either by a private corporation with public-utility status and properly regulated, or by a public corporation or market authority. Since it is not known that any private corporation is interested in building a market under these conditions, probably the most feasible and practicable approach would be the establishment of a market authority by the city of New York and the States of New York and New Jersey. Federal participation would represent the interests of people who live outside these two States. The market authority should be governed by a nonpolitical board, empowered to consider proposals made by the trade and others, develop a comprehensive program for market improvement, and put such a program into operation.

The report recommends that the management of the new market be empowered to enforce regulations that will protect the consumer, the dealer, and the farmer, and that will promote efficiency. It is not possible to estimate the amount of benefits that would come from such management, but they would be far-reaching. At present, the lack of regulation of selling hours and the lack of timely information on supplies available for sale tends to disorganize the market and to cause wide variations in prices. As New York City price quotations are followed closely in many parts of the country, price stability would have an important national effect.

The U. S. Department of Agriculture, with the issuance of this report, has gone as far as it can at present to bring about improved methods of handling fruits and vegetables in the Nation's largest city. It has no authority to put into effect the changes suggested in the report. But the Department will be in a position to do further work in developing the details of market location, lay-out, and management, in cooperation with any duly constituted agency which may be created to carry out plans for market improvements in New York City.

---0---

LOWER DELAWARE GROWERS ORGANIZE PRODUCE AUCTION

A new produce auction to sell strawberries, blackberries, cucumbers, cantaloups, and watermelons is expected to start operations at Laurel, Delaware, this year. The auction was organized by the Southern Delaware Truck Growers' Association--a group of Sussex County farmers.

About 7 acres of land on the outskirts of Laurel have been reserved for the auction building and lot. Membership fees are being used to finance the development of the auction which includes the publication of advertising literature to be circulated among potential buyers. Carmel Moore of Laurel has been named manager.

CONSUMER GRADING, COOPERATION, AND LABOR PROBLEMS HIGHLIGHT MARKETING CONFERENCE

. . . . . By J. R. Cavanagh

Adaptation of Federal grades to consumer needs, cooperation of State marketing agents with food distributors, and agricultural labor problems were major points of discussion at the Spring Conference of the Atlantic States Division of the National Association of Marketing Officials held in Washington April 22 and 23.

R. R. Pailthorp of the Agricultural Marketing Service discussed the Department's studies of Federal grades as related to consumer buying. Pailthorp pointed out that under present methods of handling it would be impossible to grade and pack highly perishable commodities such as strawberries, peaches, and tomatoes in consumer-size packages at shipping points and expect all of them to arrive at the stores in condition to meet the requirements of the grade. While peaches and tomatoes that have deteriorated can be sorted in the stores, an attempt to sort small fruits and berries would probably do more damage than good.

Horace Herr, Secretary of the National League of Wholesale Fresh Fruit and Vegetable Distributors outlined some of the problems of wholesale distributors and the methods by which State marketing agencies can cooperate with wholesale food handlers. "I firmly believe that if a wholesale distributor in any of these large eastern consuming markets could be assured of dependable volume throughout an entire season, of the type of commodity that can be priced for the low-income groups, he could and would find the retail outlets to handle it," Herr said. "The volume would have to be large, regular, and dependable. Perhaps in encouraging such arrangements there is opportunity for marketing officials to render helpful service to distributors and producers, and to consumers in the low-income group."

In the absence of Congressman Barden of North Carolina, author of the Barden amendment to the Wage and Hour Law, Mr. Herr informally discussed the Amendment and the difficulties arising out of current interpretations of "area of production" and other provisions of the Fair Labor Standards Act.

Kitchen Urges Uniform State Legislation

C. W. Kitchen, Chief of the Agricultural Marketing Service, urged the visiting marketing officials to work with other State agencies to obtain uniform State legislation affecting the marketing of agricultural products. "There is need for coordination of State marketing objectives with the aims of the Federal Government," Kitchen said. "This coordination can best be obtained through contribution by Federal and State officials of such information as legislators may need in shaping their decisions."

Dr. E. W. Gaumnitz of the Federal Surplus Commodities Corporation presented results of a survey made in 8 localities between December 18 and March 9, showing how the blue food stamps were distributed. Butter took approximately 17 percent of the stamps and eggs about 16 percent; the cereals took about 16 percent, with flour getting about 12 percent; fruits took between 17 and 18 percent of the stamps, with oranges and apples most popular. The two vegetables on the list--onions and dry beans--took 5 percent of the blue stamps. Fruits and vegeatables to gether represented over one-fifth of the stamps. Pork products were popular with consumers, lard accounting for 6 percent of the stampsand pork 23 percent.

E. J. Rowell of the Agricultural Marketing Service reviewed developments in crop and market news distribution by radio. Mr. Rowell pointed to the growing use of radio broadcasts as a means of carrying today's market information to producers in time for "Today's markets." He also outlined the types of market information being broadcast from a few central markets in cooperation with the local wholesale trade in an effort to obtain more orderly marketing of large supplies during seasons of peak movement.

Dairy and Poultry Grading Work utlined

Roy C. Potts of the Agricultural Marketing Service pointed out that graded butter and poultry are being made available to consumers. With butter, the higher scoring lots are being carried through to retail buyers under Government inspection. All four of the grades for poultry are carried through, where desired, to consumers. According to Mr. Potts the grades do not change, although the condition of the poultry may show deterioration under improper handling methods.

L. J. Todd, Poultry Marketing Specialist of the New Jersey Department of Agriculture, spoke of efforts being made to increase egg sales. He reviewed a 10-day sales campaign prior to Easter in which dairy organizations and other retailers offered a two-dozen Easter package of eggs. "This campaign", he said, "brought about not only a tremendous increase in the pre-Easter sales of eggs, but appeared to create a sustained volume following the sales campaign".

Roger Burdette of the University of Maryland discussed studies of consumer preferences for eggs in the Baltimore market. According to Burdette, Baltimore retailers in general do not know egg quality or consumer preferences other than on a casual basis. The results of the study show that Baltimore consumers prefer large eggs of fair quality at reasonable prices, with a much smaller proportion of retail buyers expressing a willingness to take the medium and smaller eggs of the highest quality.

Benjamin P. Storrs, Connecticut; Webster J. Birdsall, New York; Warren W. Oley, New Jersey; Louis K. Webster, Massachusetts; C. W. White, Maine; S. B. Shaw, Maryland; and J. H. Meek, Virginia, contributed to the discussions on the duties and functions of State marketing agencies and

the extent to which further services should and may be made available to producers and handlers of agricultural crops. Along this same line of discussion, P. L. Koenig, of the Agricultural Marketing Service outlined recent developments in crop reporting methods and services, with major emphasis on providing truck crop and fruit production and market news information.

A round table discussion of the adaptation of Federal grades to consumer needs was led by Mrs. Lottie Randolph, Assistant Director of the Ohio Department of Agriculture.

S. W. Hiatt of Florida presented a paper from Florida's Marketing Commissioner, L. M. Rhodes, on the early history of the National Association of Marketing Officials. H. A. Dwinell, Director of the Vermont Bureau of Markets responded to Mr. Rhodes' paper by discussing current and future possibilities open to members of the Association who are working toward the performance of service functions in their various States.

---0---

BUMPER CORN CROP BEING HARVESTED IN ARGENTINA

First official estimate of the 1939-40 Argentine corn crop now being harvested forecasts a total production of 434 million bushels. A crop of that size would be the second largest of record--the record crop being 452 million bushels, produced in 1930-31. Last season's crop was very small--only 191 million bushels--compared with the average for the 5 years ending with 1937-38 of approximately 328 million bushels.

Argentina is the second largest corn-producing country in the world, ranking next to the United States, which produces an annual average of 2,309,674,000 bushels. The bulk of the Argentine crop consists of the flint varieties, as compared with the softer or dent varieties grown in the United States. As the world's largest corn exporter, from 80 to 85 percent of the Argentine crop is normally shipped to European markets.

The heavy exportable supplies constitute a particularly serious problem in Argentina this year because of the war in Europe, according to information received from the American Embassy in Buenos Aires. By the end of March this year corn prices in Argentina had declined to about 34 cents a bushel. In order to help farmers meet their harvesting costs and to prevent a congestion of terminal storage facilities because of excessive marketings, the Government on April 2 announced that it would advance growers the equivalent of 15 cents a bushel, shelled basis, on all corn properly stored on the farms.

---0---

An improvement in general economic conditions by summer was recently predicted by the Bureau of Agricultural Economics.

BALTIMORE NEWSPAPER DEFENDS LOOSE-LEAF TOBACCO SYSTEM

Complaints have been numerous in Maryland about the old State-warehouse system of marketing tobacco, says an editorial in the Baltimore "Sun". "Buyers of tobacco have repeatedly said that they could not be sure of quality under such a system. They have objected to a selling procedure which forces them to buy whole hogsheads of tobacco at a time and on the basis of a single sample. They have argued that they much prefer the loose-leaf auction system, where tobacco is exposed to the view of the buyer and where he can see what he gets and pay accordingly.

"The loose-leaf system, which was inaugurated last year with the establishment of 2 new warehouses at Hughesville and Upper Marlboro, has had only a year of trial. To urge a return to the older methods of selling, about which so much complaint has been made, on the basis of a single year's experience with the newer method, implies an excess of conservatism. Moreover, it runs contrary to the sound merchandising principle that the customer is always right."

---0---

GOVERNMENT EGG PURCHASES HELP TO SUPPORT MARKETS

Heavy Government purchases of eggs helped to support egg markets during April. In addition, so-called "speculative interest" on the part of commercial buyers, who felt that storing at current values was a safe risk, served to keep prices from changing much during the month. Storing of shell eggs and frozen eggs since the first of April has not equalled the volume of last year, and stocks are below average. The heavier terminal market receipts have moved directly into consumption through regular distribution or through relief channels.

---0---

COMMODITY LOAN INSPECTORS ATTEND GRAIN-GRADING SCHOOLS

Grain supervisors of the Agricultural Marketing Service, in cooperation with the Extension Service, assisted early in March in a number of grain-grading demonstrations, given at a series of schools for commodity loan inspectors of the State of Iowa. These schools were held at Des Moines, Marshalltown, Cedar Rapids, Fairfield, Council Bluffs, Denison, Orange City, Algona, New Hampton, and Fort Dodge. Attendance ranged from 75 at Cedar Rapids to 143 at Fort Dodge, with a total of nearly 1,000 for all of the schools.

A number of grain-grading schools were arranged for the first week in May at several points in the Sacramento Valley of California. These schools were conducted primarily for the grain growers of the Valley, though buyers, dealers, and warehousemen in that area were invited. During the first 3 weeks in May other schools will be conducted in Washington, Idaho, Utah, Montana, and Texas.

A NEW MARKET FOR ATLANTA

By W. C. Crow

The wholesale fruit and vegetable market of Atlanta serves thousands of consumers in and around the city, and also is a concentration point for products grown throughout the State and the surrounding area. Farm products concentrated in this market are distributed to more than half the States in the Union. It is estimated that the volume of fruits and vegetables passing through Atlanta now totals 17,000 carloads annually--twice as much as that handled by other cities of the same size--and double the volume of 5 years ago.

These figures indicate the tremendous possibilities of a modern market able to meet all requirements. Atlanta has never had such a market. Produce Row, which is still in operation, was built in 1914. But this market was not large enough to keep pace with the big expansion of the fruit and vegetable industry which has come about in recent years. Its cramped quarters made the handling of farm products from motortrucks slow and expensive.

The problem was partially solved 5 years ago when additional land not far from Produce Row was leased. But the new market, as finally constructed, was not modern in any sense of the word. It had no rail connections, its location in the business district was disadvantageous to truckers, the buildings were not properly designed, and it was too small to handle the ever-increasing volume of business. The lease on this market site expires at the end of 1940.

To maintain adequate facilities, Federal, State, and municipal agencies hope to provide Atlanta with one of the largest, most modern fruit and vegetable markets in the Southeast. The new market will have wide streets, well-designed buildings and sheds, and will be enclosed by a fence to facilitate proper regulation. The site has not been selected, but those under consideration are outside the business district and provide for rail connections and easy access to arterial highways.

The cost of the proposed market is estimated in the neighborhood of $1,500,000. The Reconstruction Finance Corporation has indicated that the market is eligible for a loan of $500,000, which would be used for the purchase of land and materials. And the Works Progress Administration is willing to provide from $1,000,000 to $1,250,000 for labor and a part of the materials. If the market is built, an estimated 700 to 900 persons would be given work for a period of from 9 months to a year.

Present plans provide for a five-man board of control. This board would be composed of the State Commissioner of Agriculture, the State Director of Extension, a representative from dealers at the market, a representative of the municipal government, and an official designated by the United States Department of Agriculture. This management, it is believed, will adequately represent the various groups interested in the proper functioning of the new enterprise.

(Editor's Note: Mr. Crow, principal agricultural economist, is an outstanding authority on produce markets.)

PART-TIME FARMERS NEED STEADY SUPPLY OF PRODUCTS

Part-time farmers can build up a paying system of marketing their produce if they will plan to have a constant supply of products on hand through the year or at least through a season, says L. A. Dougherty, extension marketing specialist of the University of New Hampshire. For the man who has some free evenings throughout the year, milk or poultry and eggs may prove profitable. The person who has more time in winter and spring might well operate a small greenhouse and sell plants. Vegetables and small fruits will fit nicely into the schedule of the man who has the summer free.

The home farm is usually the best place to sell, adds Mr. Dougherty, unless a profitable route for steady customers proves satisfactory. An elaborate roadside stand is not necessary, but an attractive sign that tells what products are for sale is essential. Displays of goods should be easily seen from the road, but should not be exposed to the bright sunlight.

The more diversified the products for sale, the better the chance of satisfying all customers. Fresh fruits and vegetables, milk, poultry, eggs, canned goods, honey, and stored vegetables are all possible profit makers. But the individual should decide for himself which products he can best produce. A few kinds of really fine produce will give better returns than a large variety of inferior quality. Produce needs to be well graded to get repeat customers, Dougherty says, and the price must be reasonable. Shipped-in goods are neither fresh nor appealing to the purchaser who comes to the country purposely to get local products.

---0---

CONTINUOUS INSPECTION SERVICE TO CALIFORNIA CANNING CONCERNS

Two large independent canning concerns in California will use the "continuous inspection" system of the Agricultural Marketing Service during the 1940 canning season. Each step in the preparation of the products canned in these plants will be observed by Federal inspectors, and night and day shifts will be necessary during the peak of the season. Such lots as are sold for labeling with the United States grades will bear the grade statement incorporated in the shield insignia of the Agricultural Marketing Service. When the grade is indicated, it will be accompanied with the statement: "This product was packed under constant inspection of the Agricultural Marketing Service, U. S. Department of Agriculture, and the above grade officially certified." When the grade statement is not desired, the canner will be permitted to use the statement "This product was packed under the constant inspection of the Agricultural Marketing Service, U. S. Department of Agriculture."

PROBLEMS IN ADOPTING THE MILK COW

By John L. Wilson

When man took the milk cow out of her natural environment and adopted her as foster mother of the human race, nobody could foresee the vast milk industry of today--an industry beset with more than its share of complicated marketing problems. Within the past year the two largest milk-consuming centers of the United States have experienced "milk trouble." In New York City last September the milk supply was cut in half for a few days by a producers' strike. In Chicago some 34 firms and 63 individuals connected with the distribution of milk have been under investigation by the Federal Department of Justice for alleged antitrust law violations. And these cases were mild compared with the outbreaks that marked the depression period of the early 1930's.

Considering the immensity of the milk industry, it is little wonder that so much publicity has been given to its problems in the past few years. Eight out of every 10 farmers milk cows and nearly one-fifth of the cash in the farm pocketbook comes from milk--a larger proportion than from any other single farm commodity. At least 9 out of every 10 families consume dairy products in some form and the cost adds up to more than 3 billion dollars a year. The many factors connected with getting milk from producer to consumer are so complicated that not even experts agree on their solution. The fundamentals of the milk problem, naturally, begin with the cow herself.

A Natural Function Commercialized

The production of milk in its more primitive stage was a highly seasonable natural function connected with the reproduction phase of the cow. She dropped her calf in the spring of the year when grass furnished abundant feed. The first milk, or colostrum, served to give the calf a proper start in life. Milk production persisted, however, only until the calf became adapted to other feed. Then the milk flow ceased. Milk production thus was limited to a few months of the year, supporting the offspring at its period of lowest resistance.

In adapting the cow to needs of the human race, the modern dairyman has made much progress toward extending the period of production, and toward ironing out the sharpness of the seasonal peak. Present day methods of breeding, feeding, and management have transformed the milk cow into an efficient machine for converting plant elements into highly desirable human food. The milk producing period has been extended and, when several cows are available, the freshening dates are staggered so that milk is produced over the entire year. But the milk cow clings to her primitive habits and the seasonal element of production is still there. In this seasonality of production lie the seeds for many of the distribution problems of the dairy industry. And the distribution of milk is a complicated process

Milk in the hands of the farmer might well be likened to a football in the hands of a triple-threat back. There are many ways in which it may get to the consumer goal. It may be poured into a bottle and passed directly to the consumer for fluid consumption. Or it may change hands from producer to dealer behind the line of scrimmage before it is passed on to the consumer.

On the other hand, milk may get to the consumer in a more roundabout way via the manufactured route. It may go on a long end run through the cheese vat and appear on the goal line after a "time out" period in storage. Or it may go on an off-tackle smash through the condensery and reach the consumer in cans as evaporated milk. If the farmer finds no other outlet for his milk, he falls back on his hidden ball play. The milk disappears into the separator and, disguised as cream, weaves its way to the consumer through the butter factory and the grocery store. Of all these scoring possibilities, fluid milk most frequently is thrown for a loss.

Fluid Milk--The Problem Child of the Dairy Industry

City dwellers use a daily average of about four-fifths of a pint of milk per person. The milk and cream consumed in fluid form by the 100 million or so people in the United States who must purchase the milk they use accounts for fully 30 billion pounds of milk a year. This is more than one-third of all the milk that leaves the farm.

Milk consumption centers where people are most numerous--in the northeastern part of the United States. About two-thirds of the Nation's purchased fluid milk is consumed in the one-sixth of the country's land area lying east of the Mississippi and north of the Ohio and Potomac Rivers. The large urban centers of the Pacific Coast, Midwest, and South are also local areas of heavy consumption. Around each large consuming center lies an area of intensive milk production known as a "milk shed" within which milk flows toward the population center much as rain flows from a roof.

There are good reasons for most of the fluid milk originating close to its market. In the first place, milk is highly perishable and the time element of delivery is extremely important. In the second place, milk is bulky, consisting of about 7 pounds of water to each pound of solid matter, and shipping more than a few hundred miles by truck or rail is a costly process. In the third place, milk is just as good food for disease germs as it is for man. Since many people believe that only their own city representatives are able to inspect sanitary conditions properly, the area of approved production is again limited by the element of cost.

It is in these fluid milk sheds that the seasonality problem of milk production becomes acute. The average consumer has the habit of drinking about so much milk and no more. As a result, the milkman

leaves about the usual 2 quarts of milk on the doorstep every day throughout the year. Out on the farm, however, Bossy doesn't have the same habits or the same psychology. When spring warms into summer, the cow's natural urge is supplemented by abundant feed from grass. For every 2 quarts she produced during the winter she now produces 3. But when the farmer gets to town with the milk, he finds the dealer in a position to sell only the same 2 quarts for fluid use. The other quart is tagged "surplus" and must find an outlet through manufactured dairy products at a considerably lower price. And it is on this problem of price that most of the difficulties of milk marketing come to a head. This was not always so.

Coordinating Use and Supply

Back in the days when urban centers were relatively small, the problem of distributing milk was simple. The farmer often drove down the street and dipped milk out of a can into the housewife's container. As cities became larger and the consumers' demands for a more sanitary product increased, the difficulties of being both a producer and a distributor multiplied enormously. Then a third party--the milk dealer--entered the picture. He bought the milk from the producer, pasturized and bottled it, and in turn delivered it to the consumer. Thus, in the modern fluid milk industry, we have the "big three": the farmer who produces the milk, the dealer who distributes it, and the consumer who finally utilizes it.

In some of the big cities, milk distribution tended to center in the hands of a few larger dealers. As long as the farmers supplying the dealers acted independently, the large volume of business in a few hands gave the dealers some advantage in price arguments. The American farmer, however, did not overlook this bet. His policy of individual gain from group action developed in the fluid milk field some of the largest and most effective of the farm cooperatives. Large-scale control of supply by the producers' cooperative prepared the economic setting for the "class pricing" system used at present in most fluid milk markets. The dealer today no longer buys just milk. He buys milk for bottling purposes, milk to skim for fluid cream, or milk for use in certain manufactured dairy products. This is true even though the milk that meets fluid trade requirements is entirely interchangeable among these various uses.

The farmer, of course, still gets paid for his milk with one check, even though portions of his production may go for several different prices. He and his fellow cooperators lump their milk together in a "pool" which is disposed of through the best outlets the cooperative can find. The average or "blended" price each farmer gets is determined not by the uses to which his own milk goes but by the average usage of the pooled milk. How high or low this price will be depends on the general level of milk prices, and on the proportion used for fluid consumption.

Milk sold direct for human consumption commands a price above that to be used for manufacture, and justly so. In order to supply a quality of milk that meets stringent sanitary regulation the farmer must keep his cows and barns scrupulously clean. He must have his cows and laborers periodically examined to ensure freedom from disease. These extra precautions involve additional costs.

From the producer's standpoint, it is extremely difficult to determine the proper price of milk for fluid use. The price must be high enough to ensure an adequate supply of inspected milk at the season of low production. On the other hand, it must not be so high that burdensome surpluses are built up in months when production is relatively expensive. To attain these ends the price of milk for fluid purposes must be properly related to prices of milk for other uses. The linking of the fluid milk price to the condensery price with a variable differential by seasons, as instituted under the Federal Marketing Order for the Chiacago area appears to be a guiding light in this direction. The price of milk, too, must be sufficiently high in relation to prices of alternative products that enough farmers will continue to produce milk, but not so high as to stampede into the milk business every Tom, Dick, and Harry with a few acres of pasture and credit enough to buy some cows.

About the time the price becomes properly adjusted to the production side of the market, complications arise on the consumer end. The consumer who finds his income cut by business depressions may not be able to buy quite so much milk as before. Or maybe he loses his job and drifts back to the small town where he used to live. All of these things, in the aggregate, reduce the market for fluid milk and the economic factors are out of line again.

The Government Enters the Picture

It was in the depression period of the early 1930's, when milk production was at unusually high levels and consumers' incomes were at rock bottom, that price arguments between producers and dealers broke forth in strikes and violence. In these critical times the need for an arbiter paved the way for governmental control in the fluid milk industry. In the last 6 or 8 years about half of the States have enacted legislation establishing milk control boards. More than a score of cities with milk sheds extending beyond State boundaries have come under Federal market orders. The degree of control exercised varies widely among States extending as far as virtual control of both wholesale and retail pricing. In recent years, however, Federal orders have been limited to control of producer and dealer relations with no attempt to set retail prices.

The open hearings relative to factors determining price, which are held in connection with controlled markets, have done much to educate producers, dealers, and consumers in regard to each other's problems. Furthermore, the data obtained in the required audit of records have done much to assure fair play within the markets and have created a demand for similar figures for noncontrolled markets.

The stability which has come with governmental control, however, contains the possibility of surplus problems. Farmers, assured of resonable prices and a ready market for their product, have been encouraged to expand their dairy enterprise. Now and then, in view of this situation, agitation arises for production control, but, so far, the dairy farmers themselves have shown enough opposition to the idea to keep the movement from developing much headway.

Certain other tendencies, likely to develop under institutional regulation, will have to be guarded against by those in charge of administering such markets. Political abuse, if tolerated, can wreck any milk control program. And the indirect effects of price policies on the retail cost of milk, and consequently upon consumption of fluid milk, must be watched carefully. A constant alertness must be maintained for quickly discerning changes in consumption requirements reflecting changes of income, population, and many other factors.

With governmental control plans being given the legal green light in recent court decisions, more thought is being given to the permanent aspects of controlled milk marketing. The ultimate success or failure of these ventures appear likely to be determined largely by the adeptness of the administering agencies in meeting the practical problems of a complicated economic system.

Consumers Pay For Service

Consumers as well as producers have their problems. They almost unanimously agree that milk prices are too high. And retail prices undoubtedly have gone up, not only on an actual basis, but also in relation to the prices which the farmer receives for his milk. Twenty-five years ago milk was selling in New York City for 9 cents a quart. Today, delivered to homes, it costs 15 cents. Of the 6-cent increase in consumer price, the producer has received less than his proportionate share. But, curiously enough, the operating records of distributing companies show a smaller profit per quart than 25 years ago.

The explanation of this increase in price without increase in profit lies in one word--service. The consumer, when he buys a quart of milk, pays for more processing of the milk than he did a quarter of a century ago. Present day sanitary standards require the distributor to have more plant equipment and use more labor to assure the consumer a safe milk. And the consumer pays at a higher rate for the service he gets. Labor costs for the delivery of the milk to his door have gone up tremendously.

The consumer, in general, has no quarrel with labor receiving a fair and just wage for its services, but the consumer does have the right to determine how many of these services he wants. Present-day trends in milk distribution are significant. In the past 10 years store sales of milk in Chicago have risen about 130 percent, while the number

of milk route drivers has decreased from 7,200 to 4,500. With the increase in sales of store milk has come the paper milk bottle which, although not yet offering much in the way of decreasing costs, may in the future be a factor toward improved distribution methods. Large-size containers of 2-quart or gallon capacity, which require less frequent delivery and less service cost have made their appearance in many cities.

Canned Milk--Price Vs. Taste

The high cost of fluid milk has led consumers to survey carefully the field of possible substitutes. Back in 1921 a quart of fresh milk cost about 2 cents more than a 14½-ounce can of evaporated milk which represents a nearly comparable quantity of milk equivalent. In 1938 the cost of fresh milk was more than 5 cents higher. And in this period the quantity of condensed and evaporated milk consumed increased from 6 percent of the quantity of fresh milk consumed to 11 percent, a proportionate gain of 80 percent.

This rapid increase in consumption of canned milk sounds a warning to the fluid milk interests. People in general do not begin to buy evaporated milk because they like it better than fresh milk. Evaporated milk still has a characteristic caramelized flavor developed in the condensing process. But if incomes are low and there is a wide differential in the cost of the two, most people who buy milk for its health giving properties can adjust their taste to fit their pocketbook. Since taste is largely a matter of habit, some people may even prefer the evaporated milk after consuming it for a period of time.

All of these indications point in a rather definite direction. The price of fluid milk to the consumer must be kept low enough for him to buy it. The average consumer will insist upon safe milk of good quality. But, he is likely to rebel when charged for a number of services which he considers nonessential and beyond his means. Among these he may include unnecessarily high fat content, drastic sanitary regulations which add little toward safety of the milk supply, or daily delivery to his doorstep. He has no objection to these being made available to those who can afford them but he will always insist that they be made optional.

When the consumer suggests that retail costs must be reduced, the producer and the dealer each points to the other. Some concessions will have to come from both groups. A study presented at the American Institute of Cooperation last summer, however, leans toward the belief that the more fertile field for cost reduction lies in the distribution rather than the production field. The change appears likely to come not through reduced profits of distribution but through offering the consumer different kinds of service at varying prices.

Tapping the Low-Income Market

When incomes are extremely low milk consumption likewise tends to be low. A crusade to widen the use of milk among people on relief

has recently been introduced in several federally controlled city milk markets. The movement, organized in Boston, and later extended to other markets, is tied in with surplus removal plans of the Department of Agriculture. This program in general has provided for a farm price of milk below that for fluid use but above that for surplus, a low processing charge based on competitive dealer bidding, and distribution through relief channels at a retail price about half what the relief clients would pay in the open market.

From the standpoint of furnishing the recipient with good food at a low price, the program is obviously health promoting. From the angle of utilizing surplus milk, it has been endorsed by many farmer groups. Of course, some problems arise under such a program. People with private employment at low wage levels think they should be included in the benefits. Furthermore, the low processing costs of 2 cents a quart or less may be misleading to the average consumer who does not understand that the dealers may be bidding on the basis of additional costs rather than average costs. Certain dealer interests have expressed fear that relief milk will displace normal purchases and have even noted that milk depots set up under the program might serve as the first link toward municipal distribution of milk. As yet the venture is entirely in the experimental stage. Only time will determine its final outcome.

Stabilizers of the Dairy Industry

The ready conversion of milk by manufacturing processes into products less bulky and less perishable than milk itself has facilitated the ready absorption of surplus milk in areas devoted largely to production for the fluid market. It has also created a vast dairy industry in areas distant from the markets but otherwise suited to milk production. Today, butter, cheese, ice cream, and concentrated milk products manufactured in plants utilize nearly two-thirds of the milk and cream that enter commercial channels. Because most of these products lend themselves readily to long-distance transportation and to a reasonable period of storage, the problem of seasonality in production of milk in manufacturing areas is not so acute as in fluid milk areas. However, uneven production tends to prevent full use of plant facilities in the off season.

Ice cream is one of America's own contributions to the milk products field. Because its perishability creates marketing problems similar to those of milk, ice cream tends to follow in the footsteps of the fluid milk industry. The two industries are centered in about the same areas, and they react somewhat alike to business cycles. Ice cream, however, is much less of a teacher's pet and in hard times gets brushed aside with very little ado--except by little Jimmie who sorely misses his ice cream cone.

Physicists would say that ice cream has a high coefficient of expansion. When the temperature goes up in June, July, and August, so does the ice cream output--to three times what it was in the winter months. From the standpoint of milk utilization, the seasonality of ice cream production has certain advantages, for it offers an outlet

for summer surplus milk in the fluid market at a price somewhat above that for milk used in other manufactured dairy products.

One of the recent trends in the ice cream industry, incidentally, has been toward the manufacture of the product in the small freezing units commonly known as "counter freezers." In 1938 it is estimated that nearly 7 percent of the ice cream was produced in this type of unit rather than in larger plants.

Whole Milk Products Increasing

There has been a notable expansion in dairy products utilizing all the constituents of milk. Evaporated milk production has more than doubled in the last 10 years and the industry visions a rosy horizon lighted up by the hostilities in Europe. Cheese has been on a steady upgrade. And cheese production is moving South into the territory where King Cotton still holds sway. Or at least, that is the present trend. In the past 8 or 10 years cheese production in the South Central States has increased about five fold. This area, however, produces less than a tenth of the United States output of cheese.

With its product normally undergoing a curing period of several months to a year in storage, the cheese industry finds only mechanical difficulties in adapting its production phases to the seasonal cycle of milk production. In fact, many of the plants, particularly in northern sections, close shop during the winter months when conditions do not favor cheese making. Cheese is the only product in the dairy group which can climb the tariff wall with any degree of regularity. Today about a fourth of the foreign-type cheese consumed in this country is imported.

Some Butter Facts

Butter, the backbone of the dairy product industry still utilizes more than twice as much milk as goes into the other manufactured products. Furthermore, the milk which finds no other outlet can always be skimmed and churned into butter. Fifty years ago butter making was largely a farm enterprise. Four-fifths of the butter was churned on farms and only about a fifth in factories. Today the situation is just about reversed although in the Southern States the quantity of butter churned on farms is about double that of the factory product.

Those who urge "buy American" can find little fault with butter. The 14-cent tariff barrier in effect since 1930 has prevented imports of much consequence except in years of shortage.

From year to year butter consumption is about as level as the Kansas prairies. In the past 15 years the extreme variations in the annual per capita consumption of butter have been less than 1 pound on either side of a 17.5 pound average. Seasonally, butter production averages about 80 percent higher in June than in December. But the modern refrigeration plant does much to spread consumption over the year. Cold-storage holdings of creamery butter at the high point of

last season--September 1--amounted to some 173 million pounds or about 10 percent of the annual production. However, butter isn't normally carried over from one year to another. Storage stocks by April are usually very small--except in years when surplus quantities are held over by the Government for relief distribution.

Butter serves as a hub around which prices of dairy products revolve. Though the price of other individual products may flare up, a volunteer fire department composed of farmers selling cream in the butter market diverts a stream of milk toward the currently favored product and the fire is soon quenched. The interchangeability of milk between products ties the prices of cheese and concentrated milk products closely to that of butter. Even in fluid milk markets butter has an indirect control, particularly where considerable manufacturing milk is available.

Seasonally, the price of butter varies inversely with production. On the average the price in winter is higher than that in summer by just about enough to cover storage costs. The low summer price is reflected to farmers as lower prices for butterfat at that season. The "summer blues" thus created have been taken over as a theme song by those interested in improving the dairy farmer's lot.

Uncle Sam Buys In

In a number of recent years Federal price stabilization programs have made their influence felt on the butter market. In general, these have taken the form of bolstering summer prices through open market purchases and of liquidating these purchases in winter months if the price of butter advanced enough to cover storage costs. The 1937 buying program, on a rising market, was notably successful, and stocks cleared out at the end of the year without difficulty. The 1938 purchases, however, made at a time when price trends were downward, resulted in a heavy carry-over of butter in hands of Government-sponsored agencies at the end of the storage year. These storage stocks were gradually liquidated by Government distribution for relief purposes, but held over well into the summer. Open market purchases again begun in the later summer of 1939 appear to have cleared out in good shape.

Emphasis on these stabilization programs has generally come at a time when butterfat prices were low or declining. Thus, the floor established under summer prices appears to have resulted in increased returns to dairy farmers. A continuance of the programs under conditions of more nearly normal prices may bring up some complicated problems for the administrators. Determination of the proper price at which to purchase butter in the summer is always difficult. Private storage operators may feel reluctant to enter the market in years when the butter price outlook does not appear favorable. Some people do believe that if the program is successful in holding up summer prices, farmers will give less attention to maintaining milk production in winter when costs are higher. And the question of holding up prices involves the problem of butter substitutes.

A Trojan Horse in the Butter Market

The Trojans and butter have something in common, to adjust the calendar a few centuries. There were Greeks in the large wooden horse outside the gates of Troy. It is margarine that camps on butter's threshold, waiting only for rising butter prices to push the door ajar.

In early days of margarine manufacture, attempts to pass it off as butter were numerous. Reaction from the dairy interests was immediate and Federal and State laws regulating margarine distribution came into being. The present Federal tax of 10 cents per pound on colored margarine traces its legal background to court decisions based on the resemblance of yellow margarine to butter. Today margarine is sold on its own merits as a fat, with practically no attempt to pass it as butter.

For purposes of regulation, the Federal Government taxes uncolored margarine a nominal one-fourth cent per pound and a small license fee. Many States have excise taxes and licenses on margarine that are much higher. These range from no tax at all on certain types of product in some States to practically prohibitive taxes on all margarine in others.

Seven or eight years ago a tax on margarine was a tax on the "coconut cow" for about three-fourths of the ingredients were coconut or other imported vegetable oils. Today, 80 percent of margarine ingredients are domestically produced oils, largely vegetable. In levying taxes on margarine, States have notably favored that made from their native products. Some people feel that the State taxes constitute interstate trade barriers and that a confiscatory tax on margarine, when purchased and sold as such, will be increasingly difficult to maintain. Cotton interests have rallied to the margarine cause, even though cottonseed products used for feed by dairymen appear to have been worth several times as much as the cottonseed oil used in margarine. The recent trend toward the use of soybean oil in margarine--nearly a fifth of the total in 1939--appears to foreshadow an attempt to enlist similar aid from the farmers closer to the main Dairy Belt.

As the situation stands today, butter, with its palatability, its yellow color for eye appeal, and its health qualities well presented, has the inside track on consumer preference. But modern chemical methods have made margarine an acceptable food product that offers more than other fats to those who cannot afford to buy butter. If butter costs rise too high, margarine always stands ready to step into the picture. Until that time, butter will continue to be the standard item on the American table.

By-product Utilization

The use of butter makes available a large quantity of skim milk for which industry is finding new uses. A little less than a half

century ago the farmer generally hauled his milk to the creamery for skimming in the factory separator. The creamery operator paid him for the cream but back to the farm went the skim milk to feed the pigs and chickens. Improvement in the cream separator soon made it the usual equipment on dairy farms in the butter producing regions and the farmer then hauled only the cream to the butter factory. Now we find the farmer again shifting toward the sale of whole milk. The reason this time is that factories are finding it so profitable to utilize the skim milk that they are successfully competing with pigs and chickens for the milk by-products.

Today factory products utilize skim milk and buttermilk to the tune of 10 billion pounds a year, about nine-tenths of which is skim. Powdered skim milk, used largely in the bakery trade and to a lesser extent for animal food, represents about half of the total. Casein utilizes about 2 billion pounds, three-fourths for paper sizing and the other fourth for a large variety of products including buttons, fountain pens, paints, glue, and even artificial fibers closely resembling wool. Other major manufactured skim milk products include cottage cheese and an assortment of concentrated and dried skim products. In looking ahead, the abundant supply of skim milk available for factory usage seems likely to come in for increasing attention.

A Look Ahead

Looking still further ahead, various trends and tendencies are apparent. From the production angle the horizon broadens toward a further specialization of the cow to man's needs, with milk production expanding about in line with population. The center of the milk producing region moves southward and westward into cheaper feed areas of the Corn Belt, gradually pushing the beef cow toward the plains. Commercial dairying advances moderately in the South, and farmers in the West milk more cows as population increases. From the consumer angle dairy products on the table assume an improved quality and increased variety.

In the fluid milk industry there crystallizes a gradation of service to meet the needs of both rich and poor. Safety of the milk supply continues to be stressed, but inspection systems may be coordinated. Perhaps a Government certificate issued locally will permit fluid milk and cream to move between nearby markets much as butter moves today. In the manufacturing industry more emphasis will be placed on products utilizing all the constituents of milk rather than the fat alone. In governmental control, there appears in the distance a coordination of producer, dealer, and consumer relationships toward a bigger and better dairy business.

(EDITOR'S NOTE: Dr. Wilson, Associate Agricultural Statistician for the Agricultural Marketing Service, is closely identified with the dairy production statistics program of the U. S. Department of Agriculture.)

---0---

NEW JERSEY EGG AUCTION TRIES NET WEIGHT SALES

Better returns to poultrymen and dealers are expected as the result of a new plan to sell eggs by net weight, which was tried recently at the Flemington, N. J., Egg and Poultry Auction. Leon Todd, supervisor of poultry products marketing, New Jersey State Department of Agriculture, announced recently that the plan probably would be adopted by all auctions in the State as soon as certain details had been perfected at Flemington.

"The sale of eggs on a gross-weight basis has been unfair to producers and buyers, inasmuch as some of the 30-dozen wooden cases did not weigh the amount allowed in computing the gross weight," Mr. Todd explained.

"Since it is impossible to transfer the eggs from one case to another after they arrive at the auction markets, it has been found practical to weigh the empty cases at the auction market before they have been sold to the producers. Each empty case will be properly stamped with its tare weight and the insignia of the auction. No case will be supplied for second usage until it has been reweighed by the auction."

---0---

SEEK NEW OUTLETS FOR MAPLE SIRUP

While maple sirup and griddle cakes seem to be inseparable to most people, maple sirup producers actually realize more from the sale of their product in the form of maple cream, maple sugar, or some product other than the sirup itself, says Dr. C. O. Willits, chemist at the New York State Experiment Station at Geneva, who is making a special study of possible new uses for the product. Dr. Willits discusses the production and use of maple sirup in the current issue of "Farm Research", the Station's quarterly magazine.

It is estimated that about 10 percent of New York State's maple sirup output is retained for home use either as sirup or sugar and that about half of the remainder is sold at retail, mostly as sirup. The remaining portion of the sirup is sold to maple sirup processors and nearly all of it is shipped out of the State, mostly to Vermont. About one-half of this sirup is retailed as blended maple table sirup, pure maple table sirup, sugar, and candy. The remainder, or about one-fourth of the entire output, is employed in the treatment of tobacco.

The development of new uses for maple sirup would mean greater returns for the producer, in the opinion of the Station specialists. As a step in this direction they are already at work on a pure maple jelly, the development of maple concentrates, the improvement of granulated maple sugar, the use of maple sirup in the curing of hams and bacon, and other possible outlets.

HUMAN BEINGS RATE LOW ON THE MOSQUITO'S MENU

Persons who insist they are the favorite food of all the moquitoes at a picnic probably are right, say entomologists of the Department of Agriculture. Some individuals do attract mosquitoes more than others. But horses and cattle are even more attractive to the female mosquito--the sex that bites.

Recent work by Federal entomologists bear out earlier investigations and show that when the mosquitoes have free choice they prefer horses and cattle to human beings by about 6 to 1. Pigs were about 3 times as popular as humans. Dogs were slightly preferred. Man, from the mosquito's point of view, rates only slightly ahead of chickens and cats in a gastronomic sense.

By a comparatively simple but delicate laboratory procedure known as the precipitin test, the scientist can identify the source of the small quantity of blood in a full-fed mosquito. Checking the blood sources in a representative collection of mosquitoes reveals the food preferences of the insects. But the mosquito is not a fussy feeder; she takes what she can get. Of the mosquitoes captured inside houses more than a third had dined on humans.

---0---

CALIFORNIA LEADS IN TRUCK CROP ACREAGE

California's leading place in vegetable crop acreage among the States is shown in detail by the annual summary of commercial truck crop acreages by counties for 1939, issued by the Federal-State Crop Reporting Service. The report, prepared by truck crop statistician Carl Schiller, shows that a total of 564,960 acres were harvested. On the basis of acreage, other States ranked as follows: Texas, second; Florida, third; New York, fourth; and New Jersey, fifth.

---0---

Oregon State College has again protested against allowing radio station KOY, Phoenix, Arizona, to operate on the same frequency as KOAC, and has petitioned the Federal Communications Commission for a hearing and special relief. The college has opposed the change on the ground that the Arizona station interferes with the college's market broadcasts.

---0---

The latest wrinkle in frozen food distribution--door-to-door selling from refrigerated trucks--is being tried out in Ardmore, a suburb of Philadelphia, says an article in Business Week. Special efforts are being made to sell complete dinners.

---0---

--PERTAINING TO MARKETING--

The following publications, issued during April, may be obtained upon request:

From the Agricultural Marketing Service:

Market Classes and Grades of Pork Carcasses and Fresh Pork Cuts (Revised Circular 288)...By W.C.Davis, B.F.McCarthy, and J.A.Burgess

Quality and Prices of Cotton Linters Produced in the United States, 1933-38...By Victor R.Fuchs

Wholesale Prices of Fruits and Vegetables at New York City, Chicago, and Leading Shipping Points, By Months, 1939

Arkansas Cotton...By Stuart L. Bryan. A cooperative statistical bulletin of the Agricultural Marketing Service and the Arkansas Agricultural Experiment Station

Official United States Standards for Grades of Veal and Calf Carcasses...S.R.A.--A.M.S.114

Tentative U.S.Standards for Grades of Canned Asparagus

Income from Potatoes...By Harry W. Henderson, R.E.Johnson, Gustave Burmeister, and C.M.Purves (In cooperation with the Bureau of Agricultural Economics)

Market Summaries:

Marketing Western New York and Pennsylvania Grapes, 1939... By J.C. Keller and A.L.Thomas

Marketing Western New York Peaches, 1939...By J.C.Keller and A.L.Thomas

The Wisconsin Potato Season, 1939-40

Preliminary Review of the 1939-40 Marketing Season for Idaho Potatoes...By Ralph G. Risser

Summary of the 1940 Strawberry Season (Florida)...By R. Maynard Peterson

From the Bureau of Agricultural Economics:

The South's Need for Improved Methods of Marketing Its Products... By William C. Crow (address)

Cotton Marketing in the Coastal Plain Area of North Carolina ...By J.W. Wright and G.R. Smith